

- 3 Composition/Information On Ingredients
- 3.2 Mixture

Component		Classification	Concentration
Potassium nitrat	e		
CAS No. :	7757-79-1	As Per EC Regulation 1272/2008	>=3 - <=6%
EC No. :	231-818-8	Ox. Sol. 3 H272	

Co	mponent	Classification	Concentration
Ammonium nitr	ate		
CAS No. :	6484-52-2	As Per EC Regulation 1272/2008	>=2 - <=5%
EC No. :	229-347-8	Ox. Sol. 3; Skin Irrit. 2; Eye Irrit. 2A;	
		STOT SE 3 H272; H315; H319; H335	

Сог	mponent	Classification	Concentration
Manganese sulpl	hate		
CAS No. :	10034-96-5	As Per EC Regulation 1272/2008	>=0.07 - <=0.09%
EC No. :	232-089-9	STOT RE 2; Aquatic Chronic 2 H373;	
Index-No :	025-003-00-4	H411	

	Component	Classification	Concentration
Boric acid			
CAS No. :	10043-35-3	As Per EC Regulation 1272/2008	>=0.04 - <=0.06%
EC No. :	233-139-2	Repr.Tox. 1A, 1B H360	
Index-No :	005-007-00-2		

Component		Classification	Concentration
Zinc sulphate, heptahydrate			
CAS No. :	7446-20-0	As Per EC Regulation 1272/2008	>=0.04 - <=0.06%
EC No. :	231-793-3	Acute Tox.oral 4; Eye Dam. 1; Aquatic	
Index-No :	030-006-00-9	Chronic 1 H302; H318; H410	

nponent	Classification	Concentration
59-67-6	As Per EC Regulation 1272/2008	>=0.01 - <=0.03%
200-441-0	Eye Irrit. 2A H319	
	59-67-6	59-67-6         As Per EC Regulation 1272/2008

For the full text of the H-Statements and classification mentioned in this Section, see Section 16

## 4 First Aid Measures

#### 4.1 **Description of first aid measures** General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Consult a physician. *In case of skin contact* Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse immediately with plenty of water for at least 15 minutes. Consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11. 4.3 Indication of immediate medical attention and special treatment needed Treat symptomatically. 5 **Fire Fighting Measures** 5.1 **Extinguishing media** Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media No data available. 5.2 Special hazards arising from the substance or mixture Magnesium oxides, Sulphur oxides, Sodium oxides, Iron oxides, Calcium Oxide, Cobalt oxides, Copper oxides, Manganese oxides,, Molybdenum oxides, Oxides of Phosphorus, Potassium oxides, Zinc oxides 5.3 **Precautions for fire-fighters** Cool closed containers exposed to fire with water spray. 5.4 **Further information** Wear self-contained breathing apparatus for firefighting if necessary. **Accidental Release Measures** 6 6.1 Personal precautions, protective equipment and emergency procedures Use personnel protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. 6.2 **Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see Section 13.

#### 7 Handling and Storage

## 7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Wear protective gloves and eye/face protection. Use only in well ventilated areas. Keep away from heat, sparks and open flame.

- **7.2** Conditions for safe storage, including any incompatibilities Store in cool/well-ventilated place.
  - **Recommended Storage Temperature :** 2 8°C

# 7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## 8 Exposure Controls/Personal Protection

8.1 Control parameters

## 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks, immediately after handling the products and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Have eye-washing facilities readily available where eye contact can occur.

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Body protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. *Respiratory protection* 

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Environment exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### Physical and chemical properties 9

#### 9.1 Information on basic physical and chemical properties

-	mornation on basic physical and encinear proper	
	Appearance	White to off-white, homogenous powder
	Odour	No data available
	Odour Threshold	No data available
	рН	3.3 - 4.3
	Melting/freezing point	No data available
	Initial boiling point and boiling range	No data available
	Flash point	No data available
	Upper/lower flammability or explosive limits	No data available
	Evaporation rate	No data available
	Flammability (Solid, gas)	No data available
	Vapour pressure	No data available
	Relative density	No data available
	Water Solubility	Soluble in water
	Autoignition Temperature	No data available
	Decomposition Temperature	No data available
	Viscosity	No data available
	Explosive properties	No data available
	Oxidizing properties	No data available
	Vapour density	No data available
	Thermal decomposition	No data available

## **Other safety information** No data available 9.2

<ul> <li>10 Stability and Reactivity</li> <li>10.1 Reactivity <ul> <li>No data available</li> </ul> </li> <li>10.2 Chemical stability <ul> <li>Stable under recommended storage conditions.</li> </ul> </li> <li>10.3 Possibility of hazardous reactions <ul> <li>No data available</li> </ul> </li> <li>10.4 Conditions to avoid <ul> <li>No data available</li> </ul> </li> <li>10.5 Incompatible materials</li> </ul>		
<ul> <li>10.1 Reactivity         <ul> <li>No data available</li> </ul> </li> <li>10.2 Chemical stability             <ul> <li>Stable under recommended storage conditions.</li> </ul> <li>10.3 Possibility of hazardous reactions</li></li></ul>	10	Stability and Reactivity
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<ul> <li>10.3 Possibility of hazardous reactions No data available</li> <li>10.4 Conditions to avoid No data available</li> </ul>	10.2	Chemical stability
No data available <b>10.4 Conditions to avoid</b> No data available		Stable under recommended storage conditions.
10.4 Conditions to avoid No data available	10.3	Possibility of hazardous reactions
No data available		No data available
	10.4	Conditions to avoid
10.5 Incompatible materials		No data available
	10.5	Incompatible materials
No data available		No data available
10.6 Hazardous decomposition products	10.6	Hazardous decomposition products
Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur		Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur
oxides, Oxides of phosphorus,. Potassium oxides, Magnesium oxide, Cobalt/cobalt oxides, Calcium oxide, Copper oxides		

- **Toxicological Information** 11
- 11.1 Information on toxicological effects Acute toxicity

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No data available Remarks : No data available No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available Additional Information **RTECS** : Not Applicable **Ecological Information** 

12 Ecological In 12.1 Toxicity

No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil

No data available

## **12.5 PBT and vPvB assessment**

This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

#### 13 Disposal Considerations

13.1 Waste treatments methods Product

Dispose of as unused product.

## 13.2 Contaminated packaging

Burn in a chemical incinerator equipped with an afterburner and srcubber but exert extra care in igniting as this material is highly flammable. Contact a licenced professional waste disposal service to dispose off this material.

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.1	Transport Information	
	UN-No	
	ADNR : ADR : IATA_C	: IATA_P : IMDG : RID :
.2	UN proper shipping nam	e
	ADNR : Not	dangerous goods
		dangerous goods
		dangerous goods
	IATA_P : Not	dangerous goods
	IMDG : Not	dangerous goods
	RID : Not	: dangerous goods
1.3	Transport hazard class(e	s)
	ADNR: - ADR: - IATA_	<u>C</u> : - IATA_P : - IMDG : - RID : -
.4	Packaging group	
		· IATA_C :- IATA_P :- IMDG :- RID :-
1.5	Environmental hazards	
	ADR : No IMDG : Mar	ine Pollutant : No IATA_C : No
1.6	Special precautions for u	ise
	No data available	
.1	Safety health and enviro mixture Chemical Safety Assessn	
.1	This safety data sheet co Safety health and enviro mixture Chemical Safety Assessn	nment regulations/legislation specific for the substance or
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5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assessm For this product a chemic Other information H272	nment regulations/legislation specific for the substance or nent cal safety assessment was not carried out. May intensify fire; oxidizer
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302	Animent regulations/legislation specific for the substance or ment cal safety assessment was not carried out. May intensify fire; oxidizer Harmful if swallowed
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315	And the substance or specific for th
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assessm For this product a chemic Other information H272 H302 H315 H318	Animent regulations/legislation specific for the substance or nent cal safety assessment was not carried out. May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319	Animent regulations/legislation specific for the substance or nent cal safety assessment was not carried out. May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335	May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation May cause respiratory irritation
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360	May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation May cause respiratory irritation May damage fertility or the unborn child
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360	May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation May cause respiratory irritation May cause damage to organs through prolonged or repeated
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360 H373	May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation May cause respiratory irritation May cause respiratory irritation May cause damage to organs through prolonged or repeated exposure
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360 H373 H410 H411 Acute Tox.oral 4	May intensify fire; oxidizer Harmful if swallowed Causes skin irritation Causes serious eye damage Causes serious eye irritation May cause respiratory irritation May cause damage to organs through prolonged or repeated exposure Very toxic to aquatic life with long lasting effects Toxic to aquatic life with long lasting effects Acute toxicity, oral, Category 4
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360 H373 H410 H411 Acute Tox.oral 4 Aquatic Chronic 1	<ul> <li>mment regulations/legislation specific for the substance or</li> <li>ment</li> <li>cal safety assessment was not carried out.</li> <li>May intensify fire; oxidizer</li> <li>Harmful if swallowed</li> <li>Causes skin irritation</li> <li>Causes serious eye damage</li> <li>Causes serious eye irritation</li> <li>May cause respiratory irritation</li> <li>May damage fertility or the unborn child</li> <li>May cause damage to organs through prolonged or repeated exposure</li> <li>Very toxic to aquatic life with long lasting effects</li> <li>Toxic to aquatic life with long lasting effects</li> <li>Acute toxicity, oral, Category 4</li> <li>Hazardous to the aquatic environment, long term hazard, Category 1</li> </ul>
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360 H373 H410 H411 Acute Tox.oral 4 Aquatic Chronic 1 Aquatic Chronic 2	<ul> <li>mment regulations/legislation specific for the substance or</li> <li>ment</li> <li>cal safety assessment was not carried out.</li> <li>May intensify fire; oxidizer</li> <li>Harmful if swallowed</li> <li>Causes skin irritation</li> <li>Causes serious eye damage</li> <li>Causes serious eye damage</li> <li>Causes serious eye irritation</li> <li>May cause respiratory irritation</li> <li>May damage fertility or the unborn child</li> <li>May cause damage to organs through prolonged or repeated exposure</li> <li>Very toxic to aquatic life with long lasting effects</li> <li>Toxic to aquatic life with long lasting effects</li> <li>Acute toxicity, oral, Category 4</li> <li>Hazardous to the aquatic environment, long term hazard, Category 1</li> <li>Hazardous to the aquatic environment, long term hazard, Category 2</li> </ul>
5.1 5.2	This safety data sheet co Safety health and enviro mixture Chemical Safety Assess For this product a chemic Other information H272 H302 H315 H318 H319 H335 H360 H373 H410 H411 Acute Tox.oral 4 Aquatic Chronic 1	<ul> <li>mment regulations/legislation specific for the substance or</li> <li>ment</li> <li>cal safety assessment was not carried out.</li> <li>May intensify fire; oxidizer</li> <li>Harmful if swallowed</li> <li>Causes skin irritation</li> <li>Causes serious eye damage</li> <li>Causes serious eye irritation</li> <li>May cause respiratory irritation</li> <li>May damage fertility or the unborn child</li> <li>May cause damage to organs through prolonged or repeated exposure</li> <li>Very toxic to aquatic life with long lasting effects</li> <li>Toxic to aquatic life with long lasting effects</li> <li>Acute toxicity, oral, Category 4</li> <li>Hazardous to the aquatic environment, long term hazard, Category 1</li> </ul>

Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Ox. Sol. 3	Oxidising solids, Category 3
Repr.Tox. 1A, 1B	Reproductive toxicity, Category 1A, 1B
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT RE 2	Specific target organ toxicity, repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

#### **Further Information**

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